

# TECHNICAL INFORMATION

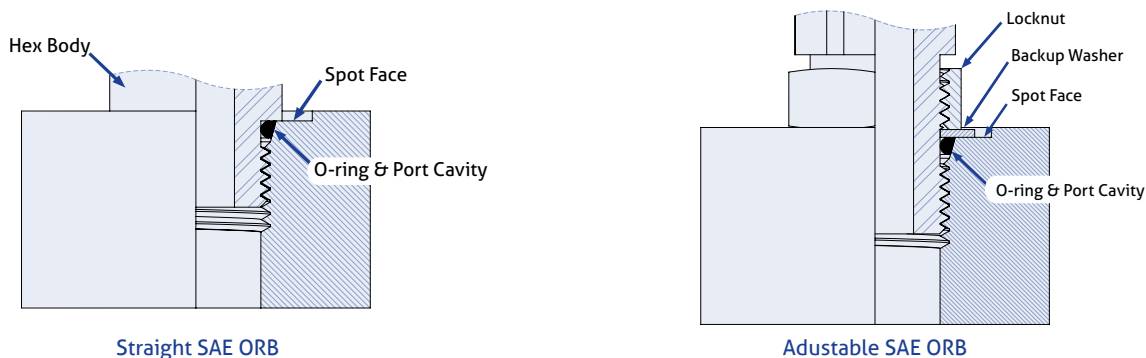
## HYDRAULIC ADAPTERS

### SAE O-Ring Boss Port Specifications

O-ring Boss ports (ORB) provide a seal by trapping the fitting's O-ring inside a port cavity. When a fitting is installed into the port, the O-ring is trapped between the fitting body hex or washer and port cavity.

Straight fittings include a hex, and sometimes an additional cylindrical shoulder below the hex and above the threads, to trap the O-ring in the port cavity.

Elbow and Tee fittings require a backup washer and a locknut above the O-ring on the threaded stud to permit a 360° orientation of the fitting around the port.



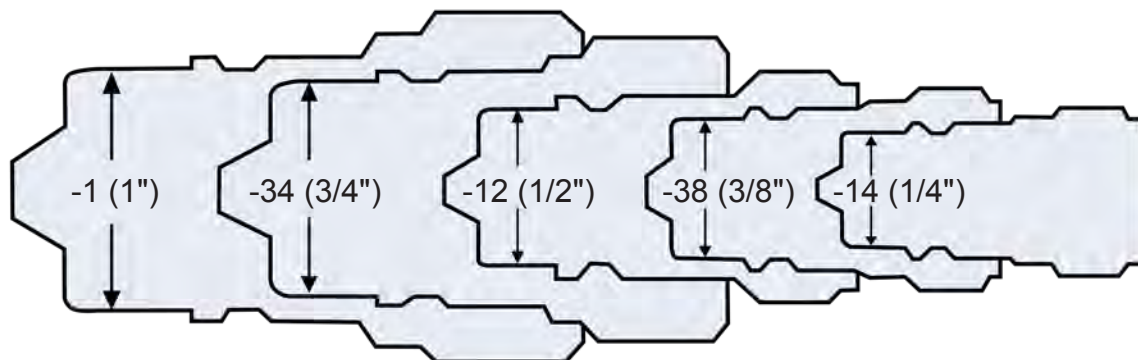
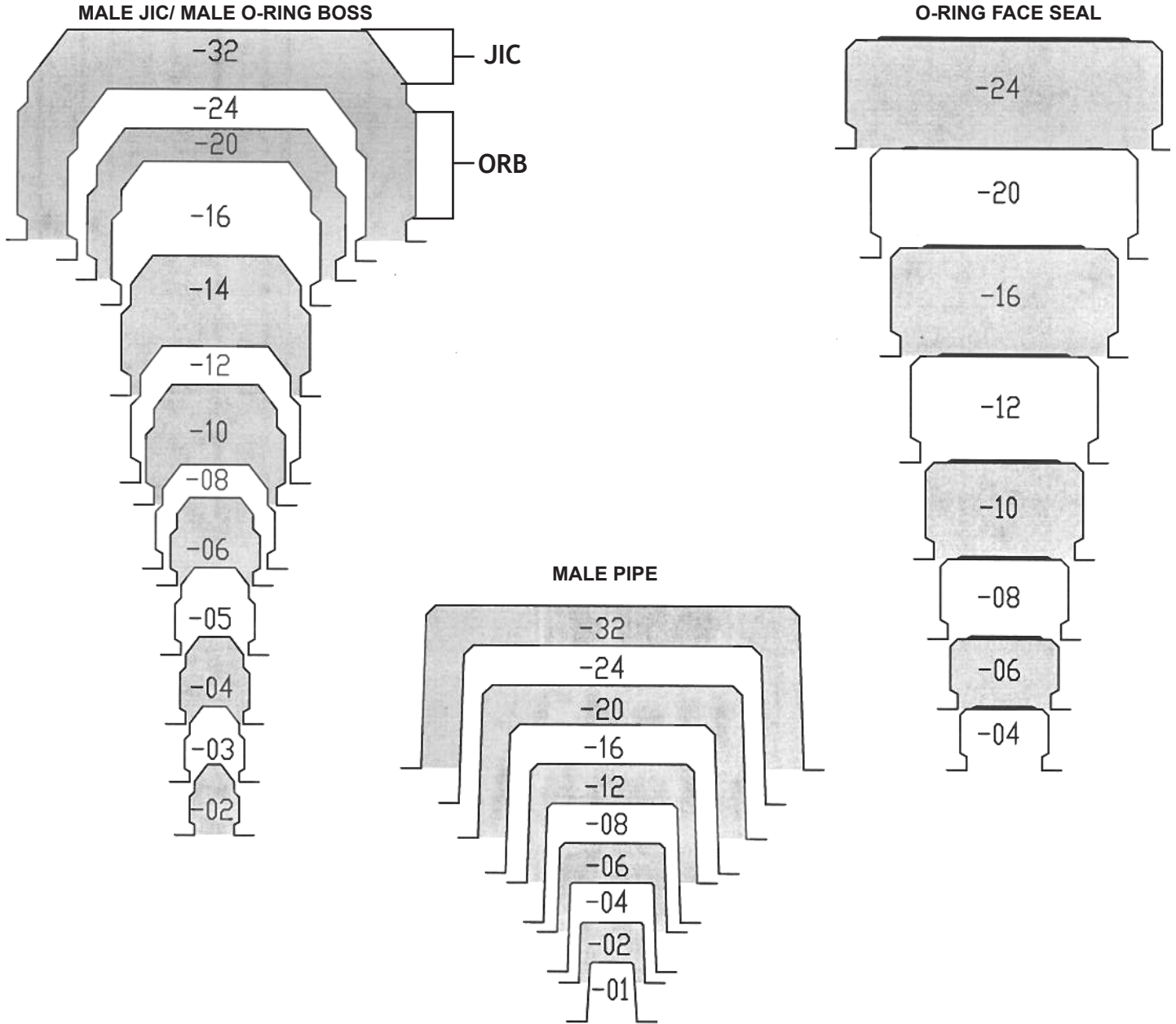
The following table lists the specifications for SAE O-Ring Boss Ports.

SAE O-Ring Boss Specifications								
Dash Size	Tube Size	Thread	SAE-ORB to JIC and Pipe Fittings*			SAE-ORB to ORFS Fittings**		
			Torque	Working Pressure		Torque	Working Pressure	
			Adjustable & Non-Adjustable	Adjustable	Non-Adjustable	Adjustable & Non-Adjustable	Adjustable	Non-Adjustable
			(ft-lbs) +25% -0%	(psi)	(psi)	(ft-lbs) +25% -0%	(psi)	(psi)
02	1/8	5/16-24	6	4500	4500	-	-	-
03	3/16	3/8-24	7	4500	4500	7	5800	9100
04	1/4	7/16-20	13	4500	4500	15	5800	9100
05	5/16	1/2-20	18	4500	4500	18	5800	9100
06	3/8	9/16-18	22	3600	4500	26	5800	9100
08	1/2	3/4-16	37	3600	4500	52	5800	9100
10	5/8	7/8-14	44	2900	3600	74	5800	9100
12	3/4	1-1/16-12	70	2900	3600	125	5800	5800
14	7/8	1-3/16-12	92	2300	2900	158	5800	5800
16	1	1-5/16-12	111	2300	2900	199	4500	5800
20	1 1/4	1-5/8-12	147	1800	2300	210	3600	3600
24	1 1/2	1-7/8-12	155	1800	2300	273	2900	3600
32	2	2-1/2-12	221	1450	1800	-	-	-

\* = Light duty studs included on JIC, NPTF and NPSM fittings per SAE J1926/3 & J514  
 \*\* = Heavy duty studs included on ORFS fittings per SAE J1926/2 & J1453

Note: Torque values are for wet torque and are allowed up to 25% the listed value according to SAE J2593.

**PROFILE SIZE CHART**



AG INTERCHANGE - NV SERIES



# STEEL O-RING ADAPTERS

## HYDRAULIC ADAPTERS

### JIC TO O-RING CONNECTOR

SAE 070120  
MS 51525



PART #	JIC THREAD SIZE 1	O-RING THREAD 2	
64002	5/16-24	5/16-24	----
64003	3/8-24	3/8-24	----
64004	7/16-20	7/16-20	----
640042	7/16-20	5/16-24	----
640046	7/16-20	9/16-18	----
640048	7/16-20	3/4-16	----
64005	1/2-20	1/2-20	----
64006	9/16-18	9/16-18	----
640064	9/16-18	7/16-20	----
640068	9/16-18	3/4-16	----
6400610	9/16-18	7/8-14	----
6400612	9/16-18	1-1/16-12	----
6400616	9/16-18	1-5/16-12	----
64008	3/4-16	3/4-16	----
640084	3/4-16	7/16-20	----
640086	3/4-16	9/16-18	----
6400810	3/4-16	7/8-14	----
6400812	3/4-16	1-1/16-12	----
640010	7/8-14	7/8-14	----
6400106	7/8-14	9/16-18	----
6400108	7/8-14	3/4-16	----
64001012	7/8-14	1-1/16-12	----
640012	1-1/16-12	1-1/16-12	----
6400128	1-1/16-12	3/4-16	----
64001210	1-1/16-12	7/8-14	----
64001214	1-1/16-12	1-3/16-12	----
64001216	1-1/16-12	1-5/16-12	----
640016	1-5/16-12	1-5/16-12	----
64001612	1-5/16-12	1-1/16-12	----
64001620	1-5/16-12	1-5/8-12	----
64001624	1-5/16-12	1-7/8-12	----
640020	1-5/8-12	1-5/8-12	----
64002012	1-5/8-12	1-1/16-12	----
64002016	1-5/8-12	1-5/16-12	----
64002024	1-5/8-12	1-7/8-12	----
640024	1-7/8-12	1-7/8-12	----
64002420	1-7/8-12	1-5/8-12	----
64002432	1-7/8-12	2-1/2-12	----
640032	2-1/2-12	2-1/2-12	----
64003224	2-1/2-12	1-7/8-12	----

6400 202702R F50X 1231 C5315

### O-RING TO PIPE ADAPTER



PART #	O-RING THREAD 1	MALE PIPE THREAD 2	
640142	7/16-20	1/8	----
640144	7/16-20	1/4	----
640164	9/16-18	1/4	----
640166	9/16-18	3/8	----
640186	3/4-16	3/8	----
640188	3/4-16	1/2	----
6401812	3/4-16	3/4	----
6401108	7/8-14	1/2	----
6401128	1-1/16-12	1/2	----
64011212	1-1/16-12	3/4	----
64011616	1-5/16-12	1	----
64012020	1-5/8-12	1-1/4	----
64012020	1-5/8-12	1-1/4	----
64012424	1-7/8-12	1-1/2	----

6401 F5X 1264R C3249

### O-RING TO 37° JIC - SWIVEL ADAPTER



PART #	O-RING THREAD 1	JIC THREAD SIZE 2	
6402044	7/16-20	7/16-20	----
6402066	9/16-18	9/16-18	----
6402068	9/16-18	3/4-16	----
6402088	3/4-16	3/4-16	----
6402086	3/4-16	9/16-18	----
640201010	7/8-14	7/8-14	----
640201212	1-1/16-12	1-1/16-12	----

6402 2266 F65X 1213 9316

### O-RING HEX NIPPLE UNION



PART #	O-RING THRD 1	O-RING THRD 2	
640304	7/16-20	7/16-20	----
640306	9/16-18	9/16-18	----
640308	3/4-16	3/4-16	----
6403012	1-1/16-12	1-1/16-12	----
6403016	1-5/16-12	1-5/16-12	----

**WARNING:** This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

# STEEL O-RING ADAPTERS

## HYDRAULIC ADAPTERS

### FEMALE O-RING TO MALE PIPE ADAPTER



PART #	O-RING THREAD 1	MALE PIPE THREAD 2	
640442	7/16-20	1/8	----
640444	7/16-20	1/4	----
640464	9/16-18	1/4	----
640466	9/16-18	3/8	----
640468	9/16-18	1/2	----
640486	3/4-16	3/8	----
640488	3/4-16	1/2	----
6404108	7/8-14	1/2	----
64041212	1-1/16-12	3/4	----
64041616	1-5/16-12	1	----

6404 2246R 1267R C3239 FHG5

### O-RING TO FEMALE PIPE ADAPTER



PART #	O-RING THREAD 1	FEMALE PIPE THREAD 2	
6405O22	5/16-24	1/8	----
6405O42	7/16-20	1/8	----
6405O32	3/8-24	1/8	----
6405O34	3/8-24	1/4	----
6405O44	7/16-20	1/4	----
6405O52	1/2-20	1/8	----
6405O54	1/2-20	1/4	----
6405O62	9/16-18	1/8	----
6405O64	9/16-18	1/4	----
6405O66	9/16-18	3/8	----
6405O68	9/16-8	1/2	----
6405O84	3/4-16	1/4	----
6405O86	3/4-16	3/8	----
6405O88	3/4-16	1/2	----
6405O812	3/4-16	3/4	----
6405O104	7/8-14	1/4	----
6405O106	7/8-14	3/8	----
6405O108	7/8-14	1/2	----
6405O126	1-1/16-12	3/8	----
6405O128	1-1/16-12	1/2	----
6405O1212	1-1/16-12	3/4	----
6405O1216	1-1/16-12	1	----
6405O1612	1-5/16-12	3/4	----
6405O1616	1-5/16-12	1	----
6405O2020	1-5/8-12	1-1/4	----
6405O2416	1-7/8-12	1	----
6405O2420	1-7/8-12	1-1/4	----
6405O2424	1-7/8-12	1-1/2	----
6405O3224	2-1/2-12	1-1/2	----
6405O3232	2-1/2-12	2	----

6405 2216R F50G 1268R C3269

### O-RING HEX HEAD PLUG

SAE 090109A



\* Not all sizes are solid

PART #	O-RING THREAD	
6408O2	5/16-24	----
6408O4	7/16-20	----
6408O5	1/2-20	----
6408O6	9/16-18	----
6408O8	3/4-16	----
6408O10	7/8-14	----
6408O12	1-1/16-12	----
6408O14	1-3/16-12	----
6408O16	1-5/16-12	----
6408O20	1-5/8-12	----
6408O24	1-7/8-12	----

6408 900598 P50N 1265 7237

### O-RING HOLLOW - HEX HEAD PLUG

SAE 090109B



PART #	O-RING THREAD	
6408HO2	5/16-24	----
6408HO4	7/16-20	----
6408HO5	1/2-20	----
6408HO6	9/16-18	----
6408HO8	3/4-16	----
6408HO10	7/8-14	----
6408HO12	1-1/16-12	----
6408HO14	1-3/16-12	----
6408HO16	1-5/16-12	----
6408HO20	1-5/8-12	----
6408HO24	1-7/8-12	----

6408HHP FF2138 HP50N 1256 7238 6409

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